SOCIAL BEHAVIOR AND PERSONALITY, 1996, 24(1),87-94
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PERSONALITY PROFILES OF WOMEN WHO REPORT AND WHO DO NOT REPORT PHYSICAL ASSAULT OR SEXUAL HARASSMENT: COMPARISONS WITH TRAUMATIC BRAIN INJURY

STEPHANIE L. DUBOIS
M. A. PERSINGER

Standardized personality profiles of young, university women who reported they had been either: 1) never assaulted or harassed, 2) sexually harassed or assaulted, or 3) physically assaulted, were compared with each other and with a group of age- and educationally-matched women, who had sustained verified traumatic brain injuries; 49% of the university volunteers reported the experience of either physical or sexual assault. The groups who had reported a history of physical assault or who had sustained brain trauma, displayed significantly higher scores for scales that infer egocentricity and deviations from rule systems, relative to the group who reported no history of assault. The possibility that even mild brain trauma (from physical assault or from injury during a motor vehicle incident) can adversely affect the sense of self is discussed.

Attribution and interpretation are a major source of variance that determines a person's conclusion that unwanted physical contact, sexual interaction or verbal suggestions have occurred. Several studies (Barak, Fisher and Houston, 1992) have indicated minimal congruence between objective episodes of even sexual harassment and subjectively perceived sexual harassment. Although normal university women may respond more negatively to behaviors that constitute harassment (Murrell and Dietz-Uhler, 1993), there appears to be little quantitative relationship between harassment experience and either attitudes or perceptions of this behavior (Mazer and Percival, 1989).

The degree to which sexual harassment is an ideology or an experience (Mazer and Percival, 1989) among university students is still unclear. Small, statistically significant effects from large samples of self report questionnaires, [that have

Stephanie L. Dubois and Dr M.A. Persinger, Laurentian University. Stephanie L. Dubois is now at Ball State University, Munice, Indiana, USA.
Thanks to Dr. P. M. Valliant for his advice and for his courage to pursue the unpopular truth.
Please send all correspondence and reprint requests to Dr. M. A. Persinger, Behavioral Neuroscience Laboratory, Department of Psychology, Laurentian University, Sudbury, Ontario P3E 2C6.

been neither standardized nor validated (Powell, 1986)], usually display effect sizes that are too weak to be considered either contributory or causal. Although negative effects of harassment upon self-esteem have been reported (Terpstra and Baker, 1986), the important contribution of "perception" to the attribution and impact of these episodes has not been delineated.

A strong relationship between perception or interpretation of events and the person's personality is evident in both normal and pathological behavior. Because individual differences rather than sexual, social or racial variables are still the major source of variance for measurements that infer psychological constructs, one would predict that the person's personality profile would be the strongest and potentially most causal component of any perception that is emotionally relevant to their sense of self and protection of the self (Persinger, 1993). The suggestion by Barak, Fisher and Houston (1992) that there may be personality-based limits for the accuracy of objective measures of the incidence of harassing behaviors is commensurate with this principle.

The present experiment was designed to discern if women who reported significant experiences of sexual harassment/ assault or physical assault exhibited different characteristics than women who do not report harassment. Because group membership (experiential history) that is based upon self-reports can be misleading, we required a comparator group who had sustained verified brain trauma. We predicted that if most physical assaults are associated with the delivery of mechanical energies to the woman's skull, women who reported physical assault should display personality profiles that were similar but not as extreme as women who have sustained traumatic brain injury. Those who reported sexual assault/ harassment should display scores that were between the group who had never been assaulted and the group who had been physically assaulted.

METHOD

Subjects

A total of 53 first year university women volunteered for the experiment; the mean and standard deviation for their ages were 23.1 years and 7.7 years, respectively (range 18 to 48 years). An additional 10 age-matched women, who had sustained a closed head injury served as a comparator group. Their formal education included one year of university or college.

Procedure

The university subjects had been recruited for another experiment (involving cognition) and were then asked to complete the information for this experiment. Each subject was asked if she had ever been assaulted sexually according to the Canadian Criminal Code Definition (Section 265). The subjects were then asked

if they had been sexually harassed or physically assaulted. Each subject then completed: the first 168 items of the Minnesota Multiphasic Personality Inventory (Vincent, et. al., 1984), the Coopersmith Self-Esteem Inventory and the State-Trait Anxiety Inventory. The subjects were also asked to respond yes or no to the three items which asked if sexual offenders engage in their behavior because of: a biological disorder, lack of social skills, sexual perversion, a need for power, uncontrolled anger, sadistic ability or a psychopathic trait; the last item asked if the subjects thought the victim enticed the offender. These questions were included in light of the hypotheses developed by Terpstra and Baker (1986). On the bases of the subjects' description of their trauma, three groups were constructed: never assaulted (n=27), physical assaulted (n=13) and either sexually harassed or sexually assaulted (n=13) and physically assaulted.

The comparator group had been referred for a complete neuropsychological assessment, subsequent to a closed head injury (motor vehicle incident), in order to determine the magnitude of brain impairment and to develop interventions. Data for all of the women within our records whose ages and educational levels were similar to the subjects were extracted (n=10). The families or spouses of all of these women had reported a frank alteration in their personalities subsequent to the injury. Relevant means and standard deviations were: Halstead-Reitan Impairment Index 0.3 (0.2) and time since incident: 0.8 (1.0) years. The scores for the scales for the Minnesota Multiphasic Personality Inventory were obtained from their files. All analyses involved SPSS software on a Vax 4000 computer. Because we were interested in the most robust effects the probability for acceptance as statistically significant was set at $p < .01$.

RESULTS

The means and standard deviations for the standardized scores for the scales from the MMPI (standardized mean=50; SD=10) for the women who: 1) did report a history of any kind of assault or harassment, 2) reported a history of sexual harassment or sexual assault, 3) reported physical assault or 4) had sustained verified brain trauma, are shown in Table 1. The standardized scores for the state anxiety, trait anxiety and self-esteem questionnaire for the women who reported no history of assault, a history of sexual assault/ harassment or a history of physical assault are also shown in Table 1.

The strongest, statistically significant differences between the groups occurred for the Hy (hysteria) and Pd (psychopathic deviancy) scales. Post hoc analysis indicated that the major source of these differences was between the group who reported they had never been assaulted relative to the groups who reported they had been physically assaulted and who had sustained traumatic brain injuries; the latter two groups did not differ significantly from each other for these two

characteristics. The scores for the group who reported they had been sexually harassed or sexually assaulted were not sufficiently different from the reference (no reported assault) to be significant statistically. Neither state anxiety, trait anxiety nor self-esteem differed between the three groups whose potential history of trauma was based upon self-reports.

TABLE 1

MEANS AND STANDARD DEVIATIONS OF STANDARDIZED SCORES FOR SCALES FROM A PERSONALITY (MMPI), ANXIETY (STATE-TRAIT) AND SELF-ESTEEM (COOPERSMITH) INVENTORY FOR YOUNG WOMEN WHO REPORTED THEY HAD NEVER BEEN ASSAULTED, SEXUALLY HARASSED OR ASSAULTED OR PHYSICALLY ASSAULTED. RESULTS FOR AN AGE-MATCHED GROUP OF WOMEN WHO SUSTAINED BRAIN TRAUMA ARE COMPARED.

Scale MMPI	Not Assault	Sexual	Physical	TBI	F
L	48 04	46 07	48 07	51 6	1.44
F	58 09[a]	62 05	71 12[b]	62 8	5.62*
K	47 07	46 9	50 12	50 9	< 1
Hs	51 10[a]	55 10	64 13[b]	62 18	4.16*
D	58 12	66 14	69 13	66 14	2.52
Hy	53 06[a]	59 08	65 09[b]	67 15[b]	9.34**
Pd	57 09[a]	62 10	71 09[b]	68 14[b]	6.67**
MF	50 11	49 11	51 12	43 08	1.07
Pa	57 10	63 07	67 15	60 11	2.61
Pt	53 12	57 11	64 13	62 13	2.45
Sc	57 13[a]	62 12	73 17[b]	52 10[a]	6.24**
Ma	68 16	66 12	66 07	71 10	< 1
Si	54 10	52 12	55 09	53 09	(1
State	51 11	54 10	49 06	—	1.12
Trait	51 11	56 10	52 10	—	< 1
Esteem	50 10	47 12	46 13	—	<1

* $p < .01$ ** $p < .001$

Chi-squared analyses indicated no statistically significant ($p < .01$) disconcordance between the university subject's reported history and their attributions to the etiology of male offenders. The percentages of women who reported affirmative to the following explanations for male assault were: biological disorder 45%, lack of social skills 77%, sexual perversion 73%, the victims are responsible (entice sex offenders) 17%, uncontrolled anger 89%, need for power 100%, sadistic ability 77% and a psychopathic trait 74%.

DISCUSSION

Mild brain impairment subsequent to physical trauma that is induced by mechanical impacts to the skull can result in significant disruptions in the capac-

ity to adapt to the social and physical environments. Disruptions of neuroelectrical activity within the brain [that are not sufficient to be discerned by X-ray computerized tomography (CT) or neurological electroencephalographic (EEG) measures] can produce marked alterations in the sense of self (Miller, 1993, Persinger, 1993).

Patients who sustain brain trauma often report they are "not the same person" since the incident and often experience periods where they feel as if they are "going crazy". We have shown clinically (Persinger, 1994; Persinger and Makarec, 1992) and experimentally (Richards, Koren and Persinger, 1992) that subtle disruption of interhemispheric homeostasis can facilitate the intrusions of linguistic images (reported as voices) or the sense of a presence. If it occurs along the left side, the experience is associated with fear or apprehension.

The present study was designed to discern if physical assault, which usually involves mechanical impact to the skull, might be associated with personality profiles that were similar to the consequences of verified brain trauma due to the dissipation of mechanical energy through the skull during the collision of motor vehicles. The results indicated that the women, as a group, who reported they had been physically assaulted exhibited the same magnitude of mild elevation as did the group who had sustained a verified trauma on scales that infer self-orientation and the propensity to deviate from social rules.

If the means for the profile were interpreted according to actuarial criteria, then the women who reported they had been assaulted and who sustained a brain trauma would display an enhanced sensitivity to rejection because of their demands for approval and the propensity to express hostility or aggression (Duckworth and Anderson, 1986). If these subjects had been seen within a psychological context, the profile would suggest chronic hostility and a tendency to become aggressive or extrapunitive in response to stress or to frustration (Lachar, 1985).

These behaviors, including frustrative irritability, are expected sequelae to sudden and significant changes in the person's sense of self and simulate the grief response to a loss of this sense (Persinger, 1993). If the sense of self-definition becomes fragile or challenged by intrusive thoughts and odd feelings, then enhanced emphasis upon self-identity would be expected (Persinger, 1993). The observation that women who reported they had been physically assaulted displayed significantly higher scores for a scale that inferred eccentric thinking (Sc) than did the group of women who had sustained a verified brain trauma (who did not differ from the referent group) suggests that these women may be more distressed than previously suspected. The impact is clearly upon the cognitive sense of self (or self concept) rather than upon self esteem. We (Persinger and Makarec, 1991) have suggested that self-esteem, as defined by the Coopersmith inventory, is an affective component of the self concept.

Despite these differences in personality profile, women who had been assaulted did not believe male perpetrators were any more or less anomalous than did the group of women who reported they had been either sexually assaulted/ harassed or never assaulted or harassed. It is possible that one source of this discrepancy is due to a restricted range artifact. The high percentages of affirmative responses, e.g., all of the women believed men offended because of issues of power, may have limited the required variability to obtain group differences.

There are several limitations to our study. First the subjects' histories were based exclusively upon verbal reports. However the subjects who reported no history of assault or harassment exhibited group scores that were all, with the exception of the hypomania (Ma) scale, within one standard deviations of the normal range (i.e., T scores between 40 and 60). The approximately +1 standard deviation above the normal range for the hypomania scale that was observed for all groups is a common observation in our measures of university students. This anomaly could reflect an artifact of the limited numbers of items (since the MMPI-168 only contains the first 168 items of this inventory and is pro-rated to a raw score equivalent) or a normal characteristic of young, university or college students.

Of course causality cannot be determined from this study. The similar profiles between the women who reported they had been physically assaulted and those who had sustained brain trauma may not necessarily imply a similar etiology. There are antithetical hypotheses for our results. For example women who reported they had been physically assaulted may have exhibited this personality profile a priori. Because personality is a strong determinant of perception and attribution, these women may be more prone to misinterpret or to confuse specific social events. The elevated frequency (F) scale would be commensurate with perceiving events differently than the population within which the scales were standardized.

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